Grade: 3rd – Adult **Time:** 1-11/2 hours

Season: Late spring – early fall

Butterfly Round-Up

National Science Teaching Standards

A. Science as INQUIRY

C. LIFE Science

E. Science TECHNOLOGY

Objectives:

- Students will be able to list some of the characteristics of moths and butterflies.
- Students will be able to identify butterflies and moths common to Iowa.
- Students will learn how to catch and release butterflies and moths.

Pre Activity:

- Study the life cycles of moths and butterflies.
- Create a butterfly or moth of your own. Draw a picture of it going through metamorphous.
- Watch the Eyewitness video, "Butterfly and Moth."

Equipment:

- Butterfly net (1 per group)
- Field guides (1 per group)
- 1 bug box per group
- microscopes and slides
- dissecting kits

Procedure:

- 1. Begin activity at Butterfly/Moth display case in the basement of dining hall.
- 2. Discuss the characteristics of moths and butterflies.
- 3. Try to identify the ones on display using field guides.
- 4. If time or weather is not cooperating for hike, prepare butterfly and moth slides. Have students rotate from microscope to microscope looking at slides of different specimens and part of the specimens (antennae, scales, veins, legs, proboscis).
- 5. Hand out 1 net, 1 field guide, and 1 bug box per 3-4 students.
- 6. Demonstrate how to catch a specimen and put in the bug box without harming it. Next try to identify it using field guide.
- 7. Begin your hike (prairie, lake, or woods) looking for butterflies or moths.
- 8. Give the students boundaries in the habitat so they can begin collecting.
- 9. Let them collect specimens for about 20-30 minutes.
- 10. Meet back together as a group to share butterflies and moths caught. Have students share specimens and identify species.
- 11. Release them back to nature.

Post Activity:

- Purchase butterfly larva and watch it change. Record data daily.
- Research the kind of plants that attract butterflies. Plant some in your school yard.
- Make your butterfly/moth from the pre activity. Be sure the top wings are symmetrical as are the bottom wings. Think about the color pattern, eye spots, camouflage, mimicking, when designing. Make the scales of colored paper or tissue paper. Share them with the class, "release" them in the classroom...let them "fly" all over the walls and ceiling!
- If you are from Polk County, invite Polk County Conservation Education to talk and tag monarch butterflies with your students.

Post Discussion:

- What are some of the predators of butterflies and moths? Identify a food chain including them
- Compare butterflies and moths. How are they alike and how are they different?
- Discuss the migration of butterflies especially the flight of the monarchs. Map their flight.
- Why would scientists tag monarch butterflies? What could they discover?
- What do species so small offer to a habitat...how does the loss of butterflies and moths affect you and your life?